

TO: Primary care providers, ERs, pulmonologists, student health, urgent care, nursing

homes, infection control, and public health

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RE: Updated Guidance for the Evaluation of Severe Respiratory Illness Associated

with Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

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Today CDC and Indiana public health officials reported a patient with confirmed Middle East Respiratory Syndrome Coronavirus (MERS-CoV) in Indiana. The patient is considered a primary case with exposure in Saudi Arabia with onset of symptoms after return to the United States.

Public health officials have carefully tracked the emergence of MERS-CoV since first reported in Saudi Arabia in April of 2012. The virus has raised public health concerns because of its similarities to the SARS virus (both are corona viruses), and because of its high case fatality ratio. According to the World Health Organization, 261 cases have been reported from 12 countries, including the United States, 93 (36%) of which were fatal. The affected countries in the Middle East include Jordan, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE), all of which appear to have had primary transmission events from non-human sources. Other affected countries include France, Germany, Italy and the United Kingdom (UK), in Europe; and Tunisia, in North Africa; and now the United States. In these countries, cases have been imported from the Middle East with some secondary transmission. All primary cases have had their exposure to MERS-CoV in the Middle East.

Infections presumably acquired through exposure to non-human sources have all occurred in the Middle East; limited transmission in the countries of Europe and North Africa has occurred in close contacts of recent travelers from the Middle East.

Health care providers in the United States should remain vigilant to the possibility of this infection in patients who present with fever, cough and pneumonia, and a travel history to the countries mentioned above. If indicated, appropriate infection control should be exercised:

2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings

http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf

Laboratory diagnostics for MERS-COV are available at the Nebraska Public Health Laboratory. Specimens should be collected according to CDC guidelines: http://www.cdc.gov/coronavirus/mers/guidelines-clinical-specimens.html

Key facts:

Person-to person transmission/nosocomial transmission: YES

Diagnostic test: real time reverse transcription polymerase chain reaction (RT-PCR). Nebraska Public Health Laboratory can run this test.

Treatment: No specific treatment; care is supportive

Incubation period has been extended from 10 days to 14 days following an exposure

In patients who meet certain clinical and epidemiologic criteria, testing for MERS-CoV and other respiratory pathogens can be done simultaneously. Positive results for other respiratory pathogens does not preclude testing for MERS-CoV.

Clusters of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) should be evaluated for common respiratory pathogens and reported to local and state health departments. If the illnesses remain unexplained, testing for MERS-CoV should be considered, in consultation with state and local health departments.

CDC web page on MERS-CoV: http://www.cdc.gov/coronavirus/MERS/